

PATENT
Attorney Docket No.: PD-N96055
Customer No.: 020991

Please add new Claims 78 through 132 to read as follows:

Sub E7

--78. (New) A system comprising:

a transmitter that is configured to transmit data on a selected one of a first satellite communication channel and a second satellite communication channel, the first satellite communication channel having a bit rate lower than that of the second satellite communication channel; and

a receiver that is configured to receive, on a selected one of the first satellite communication channel and the second satellite communication channel, the data transmitted by said transmitter,

wherein the selection between the first satellite communication channel and the second satellite communication channel is made such that:

(a) when the second satellite communication channel is selected and signal strength is below a predetermined value, then the first satellite communication channel is selected; and

(b) when the first satellite communication channel is selected and (i) signal strength is above a predetermined value and (ii) the second satellite communication channel has a load factor lower than that of the first satellite communication channel, then the second satellite communication channel is selected.

79. (New) A system according to Claim 78, wherein said transmitter effects the selection.

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80. (New) A system according to Claim 79, wherein said receiver comprises a signal strength detector that detects the signal strength, and wherein said receiver transmits the signal strength to the transmitter.

81. (New) A system according to Claim 80, wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio.

82. (New) A system according to Claim 79, wherein said transmitter transmits to said receiver an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected.

83. (New) A system according to Claim 79, wherein said transmitter comprises a load factor determination unit that is configured to determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel.

84. (New) A system according to Claim 78, wherein said receiver comprises a tuner that is configured to tune to the selected one of the first satellite communication channel and the second satellite communication channel, and a demodulator that is configured to demodulate a signal from the tuned channel.

85. (New) A system according to Claim 78, wherein said receiver effects the selection.

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86. (New) A system according to Claim 85, wherein said receiver comprises a signal strength detector that detects the signal strength.

87. (New) A system according to Claim 86, wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio.

88. (New) A system according to Claim 85, wherein said receiver transmits to said transmitter an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected.

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89. (New) A system according to Claim 88, wherein said receiver transmits the indication to said transmitter via a telephone line, a packet network, or the internet.

90. (New) A system according to Claim 88, wherein said receiver transmits the indication to said transmitter via a satellite return channel.

91. (New) A system according to Claim 85, wherein said transmitter comprises a load factor determination unit that is configured to determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel.

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92. (New) A system according to Claim 91, wherein said transmitter transmits the load factor of the first satellite communication channel and the load factor of the second satellite communication channel, as determined by said load factor determination unit, to said receiver.

93. (New) A system according to Claim 78, wherein the first satellite communication channel and the second satellite communication channel employ signals having different polarizations.

94. (New) A system according to Claim 93, wherein one of the first satellite communication channel and the second satellite communication channel employs a left-hand circularly polarized signal and the other employs a right-hand circularly polarized signal.

95. (New) A system according to Claim 78, wherein the first satellite communication channel and the second satellite communication channel employ signals having different frequencies.

96. (New) A system according to Claim 78, wherein the first satellite communication channel and the second satellite communication channel are transmitted from different transponders of a single satellite.

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97. (New) A system according to Claim 78, wherein the first satellite communication channel and the second satellite communication channel are transmitted by a single satellite.

98. (New) A system according to Claim 78, wherein the load factor of a channel is a function of a load level of the channel and a bit rate of the channel.

99. (New) A system comprising:

a transmitter that is configured to transmit data on a selected one of a first satellite communication channel and a second satellite communication channel, the first satellite communication channel having a power level higher than that of the second satellite communication channel; and

a receiver that is configured to receive, on a selected one of the first satellite communication channel and the second satellite communication channel, the data transmitted by said transmitter,

wherein the selection between the first satellite communication channel and the second satellite communication channel is made such that:

(a) when the second satellite communication channel is selected and signal strength is below a predetermined value, then the first satellite communication channel is selected; and

(b) when the first satellite communication channel is selected and (i) signal strength is above a predetermined value and (ii) the second satellite communication channel has a load factor lower than that of the first satellite communication channel, then the second satellite communication channel is selected.

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100. (New) A system according to Claim 99, wherein said transmitter effects the selection,

wherein said receiver comprises a signal strength detector that detects the signal strength,

wherein said receiver transmits the signal strength to the transmitter,

wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio,

wherein said transmitter transmits to said receiver an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected,

wherein said transmitter comprises a load factor determination unit that is configured to determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel.

*C1
contd.*

101. (New) A system according to Claim 99, wherein said receiver comprises a tuner that is configured to tune to the selected one of the first satellite communication channel and the second satellite communication channel, and a demodulator that is configured to demodulate a signal from the tuned channel.

102. (New) A system according to Claim 99, wherein said receiver effects the selection,

wherein said receiver comprises a signal strength detector that detects the signal strength,

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wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio,

wherein said receiver transmits to said transmitter an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected,

wherein said transmitter comprises a load factor determination unit that is configured to determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel,

wherein said transmitter transmits the load factor of the first satellite communication channel and the load factor of the second satellite communication channel, as determined by said load factor determination unit, to said receiver.

103. (New) A system according to Claim 102, wherein said receiver transmits the indication to said transmitter via a satellite return channel.

104. (New) A system according to Claim 99, wherein one of the first satellite communication channel and the second satellite communication channel employs a left-hand circularly polarized signal and the other employs a right-hand circularly polarized signal.

105. (New) A system according to Claim 99, wherein the first satellite communication channel and the second satellite communication channel are transmitted from different transponders of a single satellite.

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106. (New) A system according to Claim 99, wherein the load factor of a channel is a function of a load level of the channel and a bit rate of the channel.

107. (New) The receiver according to Claim 78.

108. (New) The receiver according to Claim 80.

109. (New) The receiver according to Claim 83.

110. (New) The receiver according to Claim 86.

111. (New) The receiver according to Claim 90.

112. (New) The receiver according to Claim 92.

113. (New) The receiver according to Claim 99.

114. (New) The receiver according to Claim 100.

115. (New) The receiver according to Claim 102.

116. (New) The receiver according to Claim 106.

117. (New) The transmitter according to Claim 78.

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118. (New) The transmitter according to Claim 80.
119. (New) The transmitter according to Claim 83.
120. (New) The transmitter according to Claim 86.
121. (New) The transmitter according to Claim 90.
122. (New) The transmitter according to Claim 92.
123. (New) The transmitter according to Claim 99.
124. (New) The transmitter according to Claim 100.
125. (New) The transmitter according to Claim 102.
126. (New) The transmitter according to Claim 106.
127. (New) A method comprising:
selecting one of a first satellite communication channel and a second
satellite communication channel for transmitting data from a transmitter to a receiver,
the first satellite communication channel having a bit rate lower than that of the second
satellite communication channel,
- C 1
cont.*

wherein the selection between the first satellite communication channel and the second satellite communication channel is made such that:

- (a) when the second satellite communication channel is selected and signal strength is below a predetermined value, then the first satellite communication channel is selected; and
- (b) when the first satellite communication channel is selected and (i) signal strength is above a predetermined value and (ii) the second satellite communication channel has a load factor lower than that of the first satellite communication channel, then the second satellite communication channel is selected.

128. (New) A method according to Claim 127, wherein the selection is effected by the transmitter,

wherein the receiver comprises a signal strength detector that detects the signal strength,

wherein the receiver transmits the signal strength to the transmitter,

wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio,

wherein the transmitter transmits to the receiver an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected, and

wherein the transmitter comprises a load factor determination unit that is configured to determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel.

129. (New) A method according to Claim 127, wherein the receiver effects the selection,

wherein the receiver comprises a signal strength detector that detects the signal strength,

wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio,

wherein the receiver transmits to the transmitter an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected,

wherein the transmitter comprises a load factor determination unit that is configured to determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel,

wherein the transmitter transmits the load factor of the first satellite communication channel and the load factor of the second satellite communication channel, as determined by said load factor determination unit, to the receiver.

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130. (New) A method comprising:

selecting one of a first satellite communication channel and a second satellite communication channel for transmitting data from a transmitter to a receiver, the first satellite communication channel having a power higher than that of the second satellite communication channel,

wherein the selection between the first satellite communication channel and the second satellite communication channel is made such that:

(a) when the second satellite communication channel is selected and signal strength is below a predetermined value, then the first satellite communication channel is selected; and

(b) when the first satellite communication channel is selected and (i) signal strength is above a predetermined value and (ii) the second satellite communication channel has a load factor lower than that of the first satellite communication channel, then the second satellite communication channel is selected.

131. (New) A method according to Claim 130, wherein the selection is effected by the transmitter,

wherein the receiver comprises a signal strength detector that detects the signal strength,

wherein the receiver transmits the signal strength to the transmitter,

wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio,

wherein the transmitter transmits to the receiver an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected, and

wherein the transmitter comprises a load factor determination unit that is configured to determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel.